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**Engineers & Scientists** 

10 July 2006

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Ms. Diana Messina, P.E.
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
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Subject:

Linda County Water District comments to the Tentative Draft (Dated 16 June 2006)

of the NPDES Permit for the District's Wastewater Treatment Plant

K/J 0670002.00

Dear Ms. Messina:

Thank you for providing the Linda County Water District (District) with the opportunity to state our concerns regarding the tentative draft of the District's proposed NPDES permit (No. CA0079651) (draft permit). The District has appreciated the opportunity to meet with the Regional Water Quality Control Board (RWQCB) staff to discuss our comments on earlier iterations of this draft permit. We hope to work through identified issues at this time; it is the District's desire to assist in developing a Final Permit that both the RWQCB staff and the District can support, and that we can jointly present, uncontested, to your Board.

Our comments to the latest draft permit are listed below and organized into categories. First, "General Comments" identify key topical issues in need of resolution. Second, "Specific Comments" address technical issues and other comments that are organized chronologically, by page of the permit. Our third and final category of comments identifies "Corrections and Clarifications" that need to be made to the permit.

#### **General Comments**

## 1. Proposed Time Schedules

The draft permit and accompanying time schedule order (TSO) were drafted in order to be adopted in May 2006, and many of the dates for compliance still reflect a permit based upon that schedule. The District requests that the dates for compliance in the draft permit and the TSO be revised to reflect the proposed permit adoption at the RWQCB's August board meeting. The revision of these dates would include a final compliance time frame for non-CTR criteria constituents in August 2011 rather than May 2011.

Pages 15 and 16 of the permit state that compliance with this order begins "during the period beginning on the effective date of the Order". The draft permit is significantly different from the District's current discharge permit and some time will be required to prepare to monitor all of the new discharge criteria contained in the draft permit. The District requests that the order become effective after a period of at least three months after its adoption to allow thee District time to prepare to monitor the newly listed criteria in the draft permit.

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## 2. Interim Effluent Monitoring Requirements

The draft permit includes interim effluent limitations and has an accompanying TSO that allow the District to operate its existing plant with effluent limitations better suited to the existing plant's treatment capabilities. This will allow the District to avoid violations due to the existing plants inability to comply final effluent limitations. During the time frame allowed by the interim effluent limits and the TSO, the District will operate its existing treatment plant while constructing a new treatment facility that will be capable of meeting the final effluent limitations in the draft permit.

Sampling frequencies in the draft permit's effluent monitoring requirements appear to be better suited to assure compliance with tertiary treatment level standards. During the time the District is permitted to operate its existing facility the sampling frequency of effluent limits should be appropriate to verify proper operation of a secondary level treatment facility. The District has operated its existing facility to a secondary treatment level for many years. In the District's current permit (Order 5-00-166) the RWQCB has required less frequent sampling than the draft permit proposes in order to verify proper operation of the District's existing treatment plant. While the existing plant is in use and treating effluent to a similar level of treatment to that described in the District's existing permit, a monitoring plan with the same frequency of sampling as currently performed by the District would demonstrate proper compliance with secondary level treatment standards. The District requests that the draft permit and TSO effluent monitoring requirements require a sampling frequency equivalent to that found in the District's existing permit for the time period that the District operates its existing treatment facilities to the levels specified in the interim effluent limitations and the accompanying TSO.

## **Specific Comments**

### I. Primary Issues

<u>p. 14, vii., p. F-23, Total Ammonia</u>. The final effluent limitations for total ammonia were calculated based on worst-case conditions applied to the USEPA criteria for ammonia. As worst-case conditions are based in warm weather months, the warm weather low-flow data places unnecessarily restrictive limits during colder months when plant flows are higher. The RWQCB, in accordance with SWRCB Order WQO 2004-0013 (regarding Yuba City's appealed permit), has granted seasonal effluent limits for cases where seasons exist that do not experience the worst-case conditions upon which the effluent calculations are based. Effluent limitations for these seasons would be based on data and conditions appropriate to their corresponding time periods. The RWQCB has previously employed seasonal limits for total ammonia in Order R5-2004-0028 for the City of Manteca.

According to historical data from 1 January 2001 through 30 April 2005, the maximum observed 30-day average effluent temperature for the period from November to April was 19.1°C as opposed to the maximum 30-day average effluent temperature of 25.2°C for the entire year. The District requests that a seasonal effluent limit for total ammonia be added to the permit for

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the time period from November to April based on a maximum 30-day average effluent temperature of 19.1°C.

Historical data from January 2001 to April 2005 for pH in plant effluent shows a maximum pH of 7.63 in December 2001. The historical high for pH in the receiving water was 7.83, according to sampling collected by the District for the CTR analysis in 2002 at the R-1 station. Neither set of historical data supports the assumption of a pH value of 8.5 as a worst-case scenario for the purposes of establishing an ammonia effluent limitation. The District requests that the pH level used for the calculation of an ammonia limit be re-examined and that the historical high pH of 7.83 in the receiving water be used as a basis for establishing the District's ammonia effluent limitation.

p. 14, vii., p. F-37, Mercury. The draft permit proposes a mercury effluent mass loading limitation for the District of 0.016 pounds per month. At an average flow of 5.5 MGD for a 30-day month from the District's proposed treatment plant, this equates to an average concentration limit of 0.011  $\mu$ g/L, approximately one-fifth of the human health criteria of 0.05  $\mu$ g/L. Based on historic monitoring of the Districts effluent, the District expects average mercury concentrations of 0.017  $\mu$ g/L in the proposed plant's effluent. The draft permit mass limit of 0.016 pounds per month was calculated using the District's highest noted concentration of 0.0361  $\mu$ g/L applied to the plant's current rated capacity of 1.8 MGD. When the historic mass loading from a 1.8 MGD treatment plant is applied to flow rates of 5.5 MGD, the allowable concentration is reduced to less than one third of its original level.

The proposed tertiary level treatment plant is not anticipated to remove a significantly greater amount of dissolved mercury than the existing secondary level plant, as mercury concentrations are not typically reduced by conventional tertiary wastewater treatment plants.

The District requested that further consideration be given to this mass limit criteria for mercury so that a limit may be set that reasonably protects receiving waters without setting a limit that will likely be unattainable by the District at design and permitted flows. The RWQCB staff stated at the 13 April 2006 meeting that they would give this issue additional consideration. This additional consideration has apparently resulted in a change for mercury monitoring from a 12-month rolling average to a monthly limit. The District requests that the mercury limit be monitored and reported for compliance on a calendar year annual basis.

- <u>p. 19, B., 3. pH of Disposal Ponds</u>. The draft permit states that the ponds shall not have a pH less than 6.5 or greater than 8.5. Due to environmental factors outside the District's control, pH levels in the ponds may rise over time. The District requests that the specification be re-written to specify that plant effluent maintain a pH between 6.5 and 8.5 when discharged to the disposal ponds.
- <u>p. 22, Groundwater Limitations</u>. The justification for the ammonia limit is not clearly stated. There is no agriculture goal/criterion or MUN drinking water MCL for ammonia. If the limit is based on EU Council Directive 98/83/EC, "On the Quality of Water Intended for Human Consumption, SWRCB Order No. Order WQO 2002-0015 (p. 47) states, in part, "The EU

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regulations explain that the value is intended to be used for monitoring purposes and as an indicator parameter. If the value is exceeded, the EU member states are directed to consider whether non-compliance poses any human health risk." Groundwater limitations for nitrite + nitrate are provided to protect human health for nitrogen compounds. This ammonia limitation is unnecessary. We request that it be deleted.

<u>p. E-11, Ground Water Monitoring</u>. Monitoring of "Priority Pollutants" should be limited to those priority pollutants having drinking water MCLs or other criteria defined in the Basin Plan for ground water. There are no aquatic life beneficial uses designated for ground water in the Basin Plan, thus, no need to monitor for priority pollutants that have only aquatic life criteria.

#### II. Clarifications/Corrections

p. F-75, B. Special Provisions. Item 2a requires a CTR Compliance Schedule Justification Study be submitted by 1 June 2006 in order for compliance schedules for CTR criteria-based effluent limitations to be provided. This provision should be deleted. As stated on Page F-76, item 4c, this justification was submitted on 17 January 2006 and contains "all items specified in Paragraph 3, items (a) through (d), of Section 2.1 of the SIP."

If you have any questions or comments regarding this matter, please feel free to contact me at (916) 858-2710.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

Brian G. Davis, P.E. LCWD District Engineer

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Dr. David Carlson, RWQCB

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